

PHENIX WEEKLY PLANNING



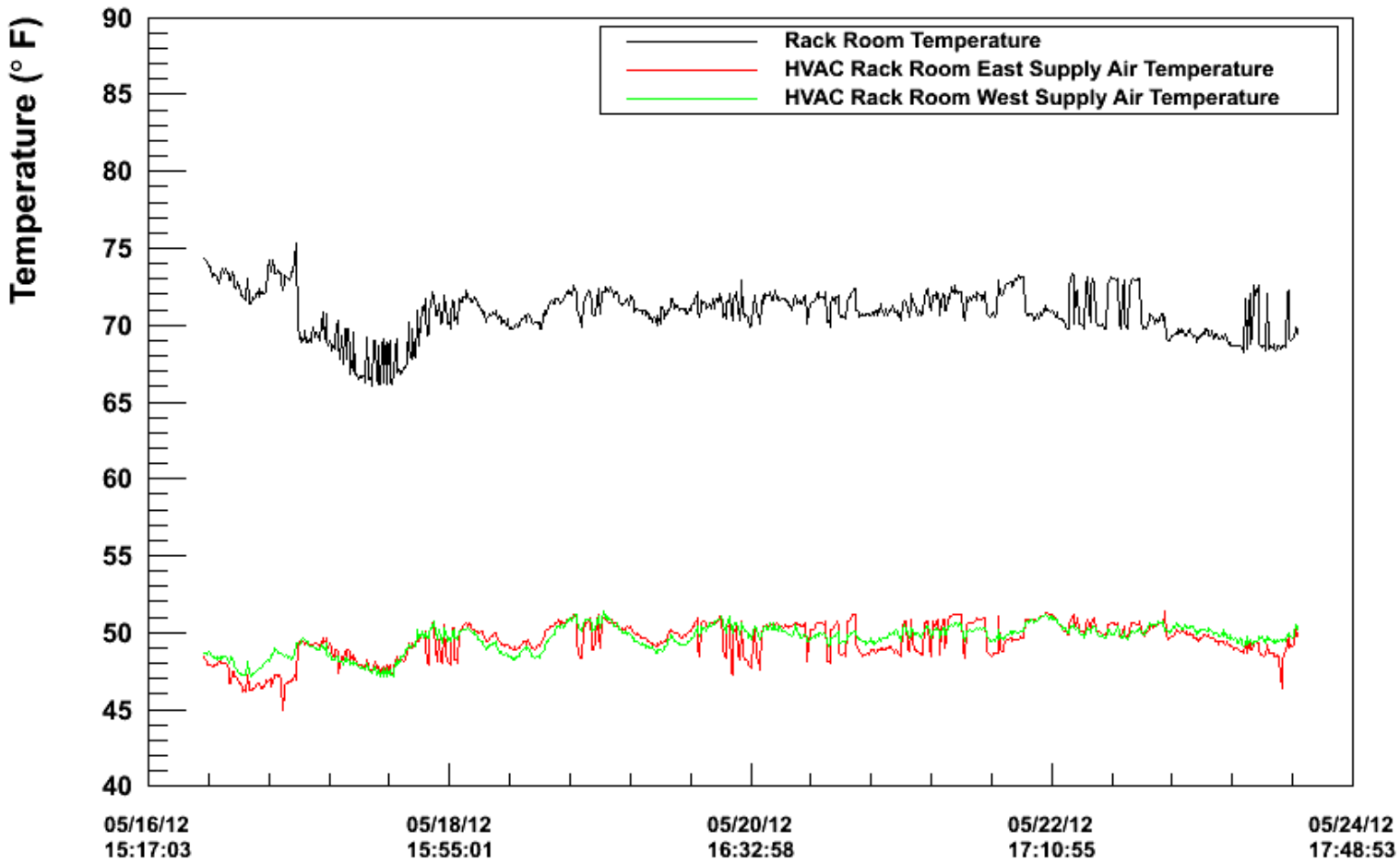
5/24/2012

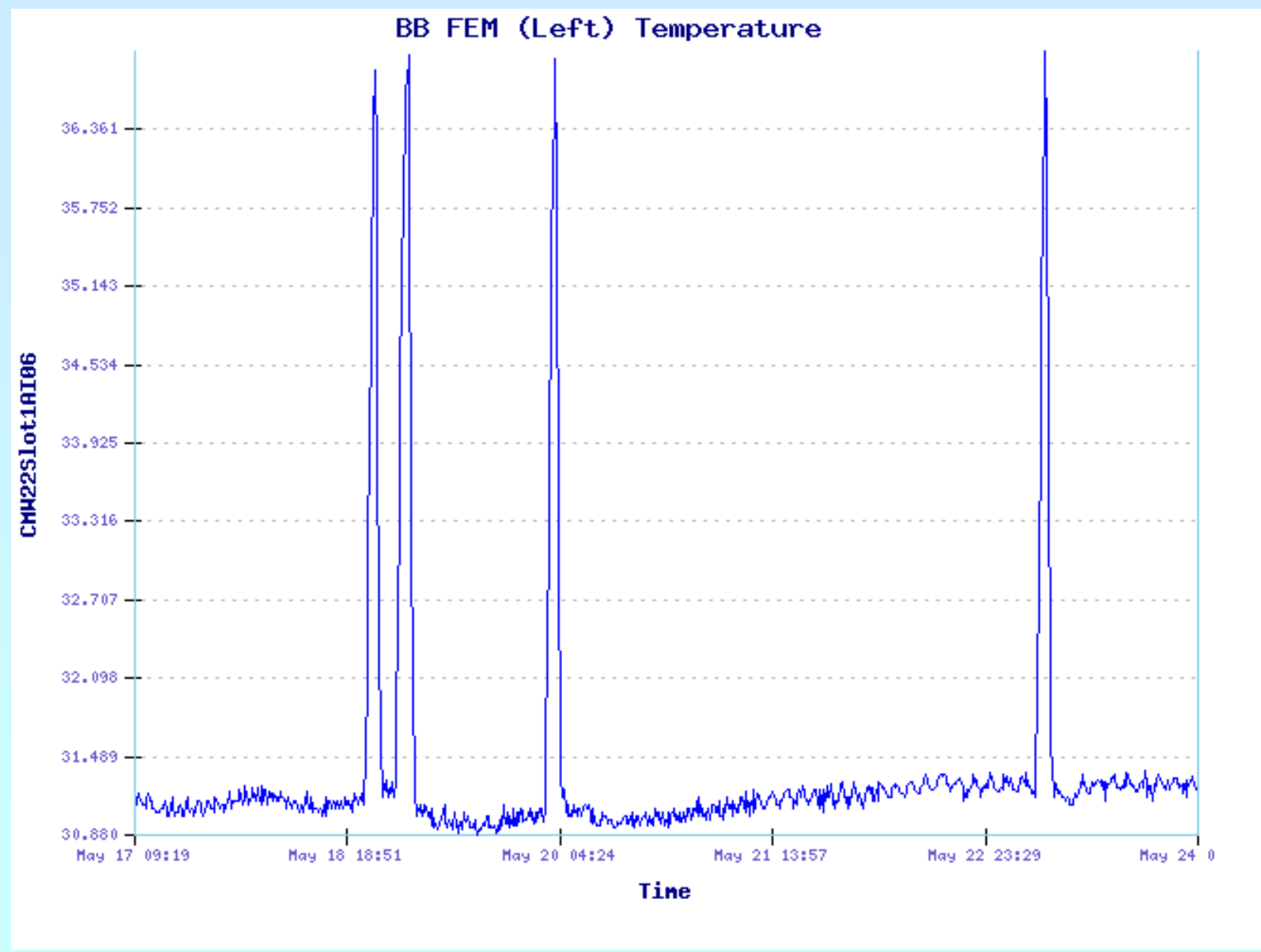
Don Lynch

This Week

- Cu-Au Run continues
- MPC incident
- VTX/FVTX Cooler incident last Night
- VTX/FVTX Shutdown planning meeting
- Maintenance access day Yesterday
 - MPC FVTX troubleshooting
- sPHENIX design and analysis continues
- 2012 Shutdown prep continues
- Other Business

PHENIX Rack Room Temperatures





Next Week

- Memorial Day, Monday 5/28: Lab Holiday
- Cu-Au Run continues
- Next scheduled maintenance access day Wednesday 6/6
- sPHENIX design and analysis continues
- 2012 Shutdown prep continues
- Other Business

Prep for shutdown	2/1-6/25/2011
Define tasks and goals	
Analysis and design of fixtures, tools and procedures	
Fabricate/procure tools and fixtures	
Tests, mockups, prototypes	
Receive, fabricate, modify, finish installables	
Review and approval of parts, tools, fixtures and procedures	
Assembly and QA tests	
AH Crane Upgrade (variable speed & wireless remote)	
End of Run Party	6/22/2012
Run 12 Ends	6/25/2012
Shutdown Standard Tasks	6/25-7/20/2012
• Open wall, disassemble wall, Remove MuID Collars,	
• Move EC to AH, etc.	
VTX Strip-pixel post run tests	6/25-6/30/2012
FVTX post run tests	7/1-7/8/2012
Disassemble VTX/FVTX services	7/9-7/27/2012
July 4 th Holiday	7/4/2012
Open Station 1 North, remove MPC North for repairs	7/9-13/2012
Remove VTX/FVTX and transport to Chemistry Lab	7/30/2012
Remove MMS & MMN vertical East lampshades	7/23-7/27/2012
Summer Sunday (8/5) Prep and teardown	8/1-8/7/2012
Summer Sunday (RHIC)	8/5/12

TECHNICAL SUPPORT ZONE

MuTr South Station 1 work	
Install access (Sta. 1 work platforms)	7/30-8/3/2012
Disconnect Cables, hoses etc, ID/label all	8/6-8/10/2012
Remove FEE plates and chambers	8/13-8/17/2012
Station 2 Terminators and manifold upgrade through access opened by station 1 removal	8/20/-8/31/2012
MPC South repairs	8/20-9/15/2012
Labor Day Holiday	9/3/2012
MuTr South Station 1 work (Cont'd)	
Clean/install new MuTr Sta. 1 chamber parts and upgrades (concurrent At RPC Factory)	8/20/-9/7/2012
Re-install chambers and FEE plates	9/10-9/14/2012
Re-cable, re-hose and test	9/10-9/28/2012
Repair upgrade, test, reinstall VTX/FVTX	7/23-10/26/2012
Station 3 North and South (upper half)	7/23-9/30/2012
re-capacitation and air manifold upgrades	
Substation breaker upgrade/test (CAD)	8/20-9/30
AH utility power distribution upgrade	8/20-9/30
DC West maintenance (replace window)	9/15-10/15
RPC stations 1 and 3, north and south maintenance	As required
Other detector maintenance as required	As required
Infrastructure maintenance as required	As required
TBD prototype tasks	As required
Open Station 1 North, re-install MPC North	10/16-10/26/2012
Veterans Day Holiday	11/12/2012

TECHNICAL SUPPORT 2012

pre-run commissioning and prep for run 13	11/1-12/31/2012
Prep for EC roll in	11/12-
11/16/2012	
Roll in EC	11/19-11/23/2012
Thanksgiving Holidays	11/22-23/2012
Prep IR for run	11/26-12/3/2010
Pink/Blue/White sheets	12/3-12/21/201
Christmas Holidays	12/24-25/2012
Start run 13	1/1/2013

New Electrical Work for 2012 Shutdown, not yet scheduled

1. Support CAD replacement of Assembly Hall 480V Fused Switch Panels #8H-1, 8H-2, and 8 EMH1. Coordinate temporary power patch while work is being performed and minimize impact on shutdown work.
2. Add the Assembly Hall Crane lockout/contactors/ indicator light key switch circuit - similar to IR Crane.
3. Add Transient Surge Suppressor to 3 phase power panel on the Central Magnet Bridge.
4. The Gas Mixing House Breaker Panel for the Gas Mixing side is almost out of spare breaker slots and needs to be reviewed for increased capacity panel to replace it.
5. New computer rack replacements/additions for upcoming Run 13 & Rack Room computer infrastructure changes involving power distribution circuit (UPS and normal AC power) re-work.

TECHNICAL SUPPORT ZONE

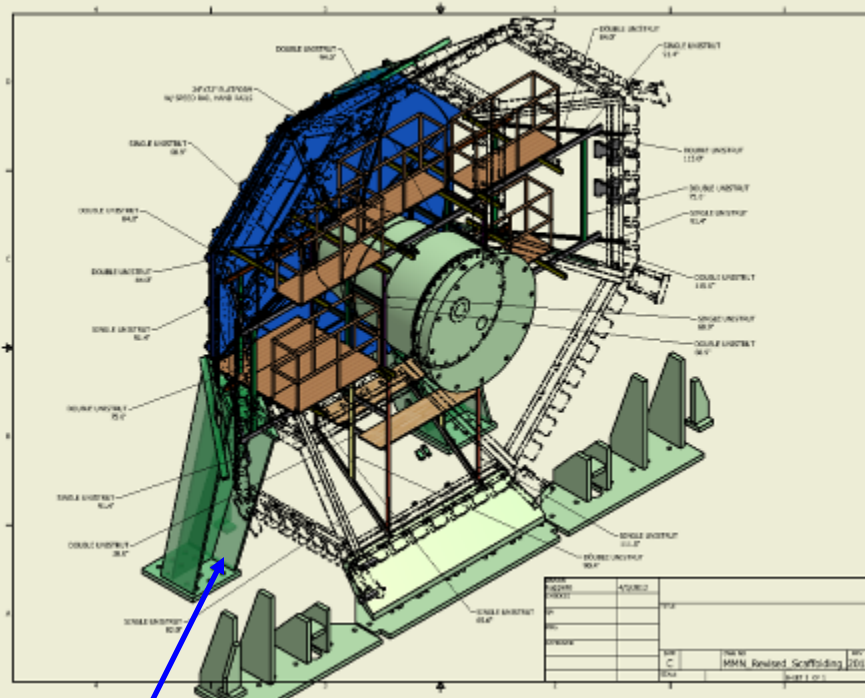
Additional Work for 2012, not yet scheduled

1. Replaced aging magnet hoses (CM only)
2. identify obsolete services passing through sill and remove them.
3. Revisit cover for services coming from IR through sill.
4. Plan for stripping out TEC electronics and services to free up TEC racks.
5. Add limit switch and improved spooling control for window washer cable.



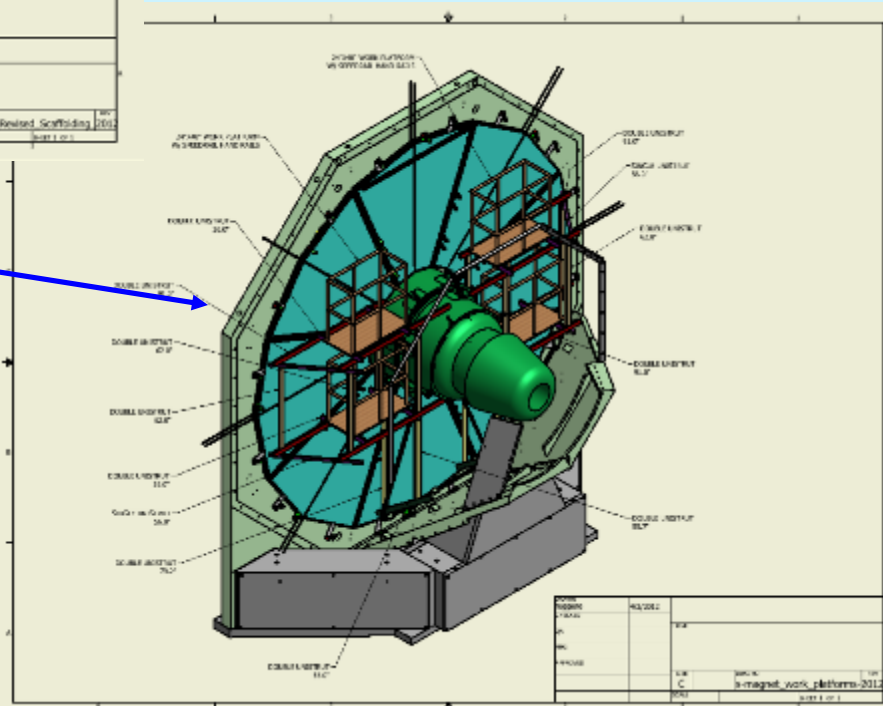
AH Crane variable speed drive
and wireless remote upgrade ??

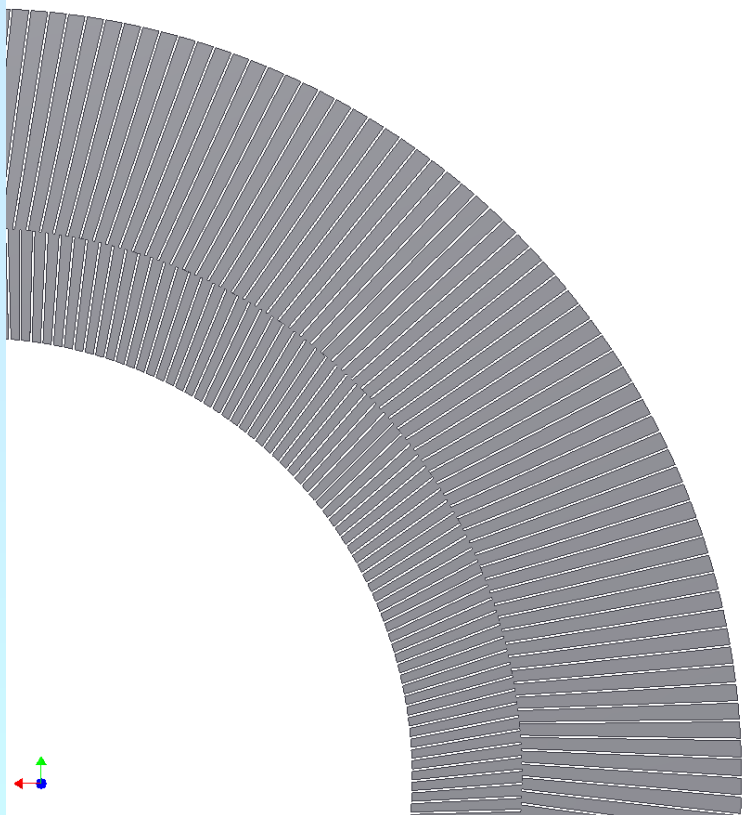




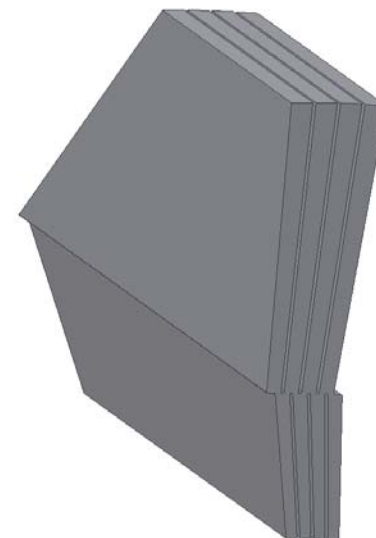
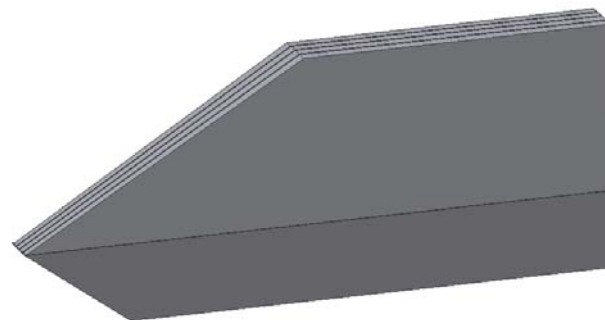
North & South internal work platforms for next summer's shutdown

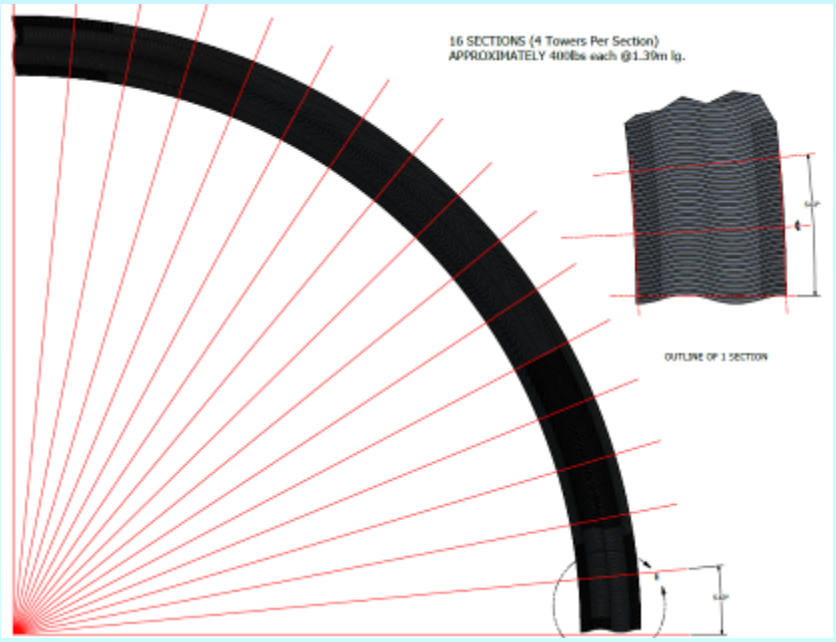
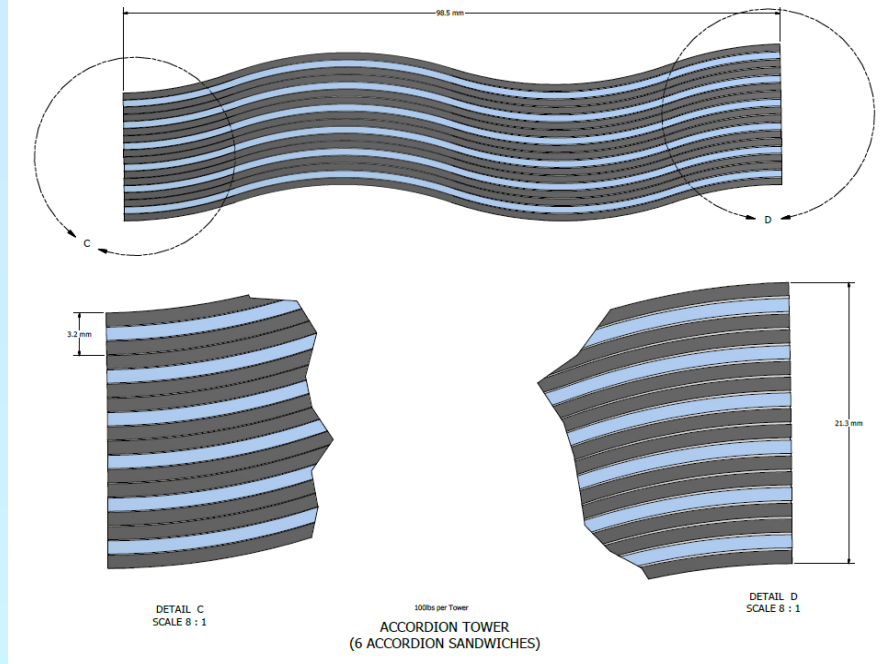
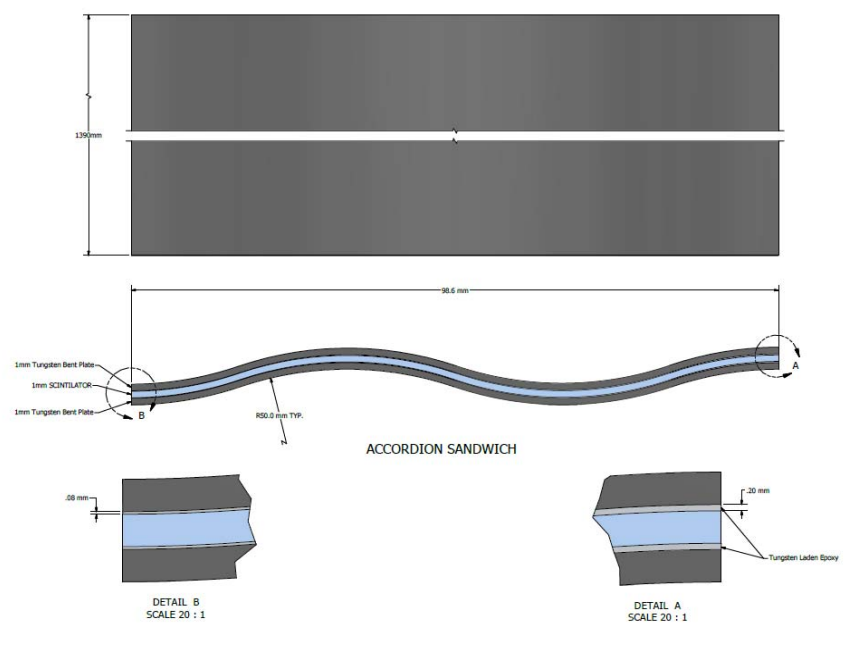
Sent analyses to C-A ESRC for review last week





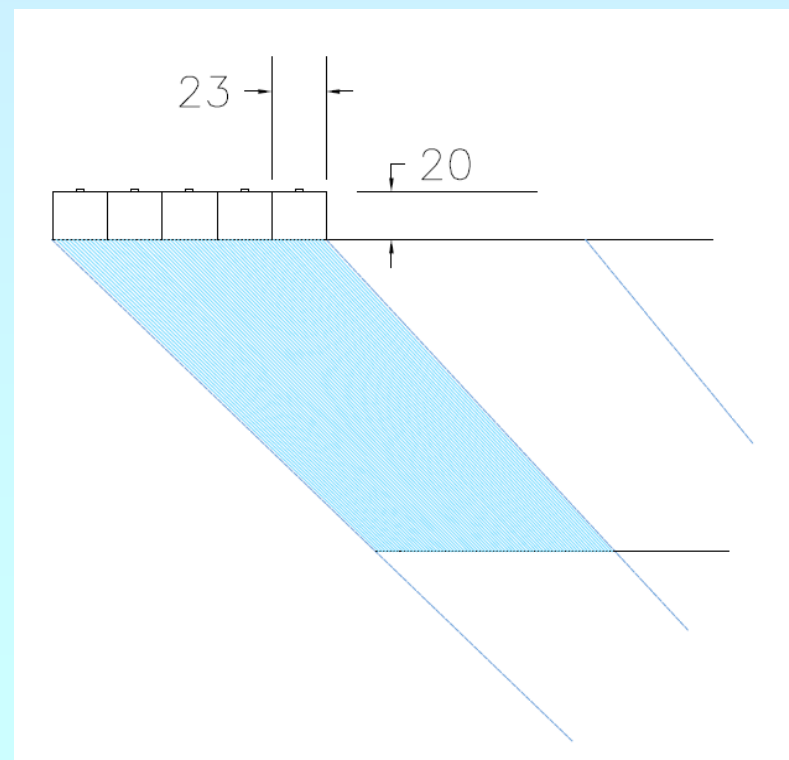
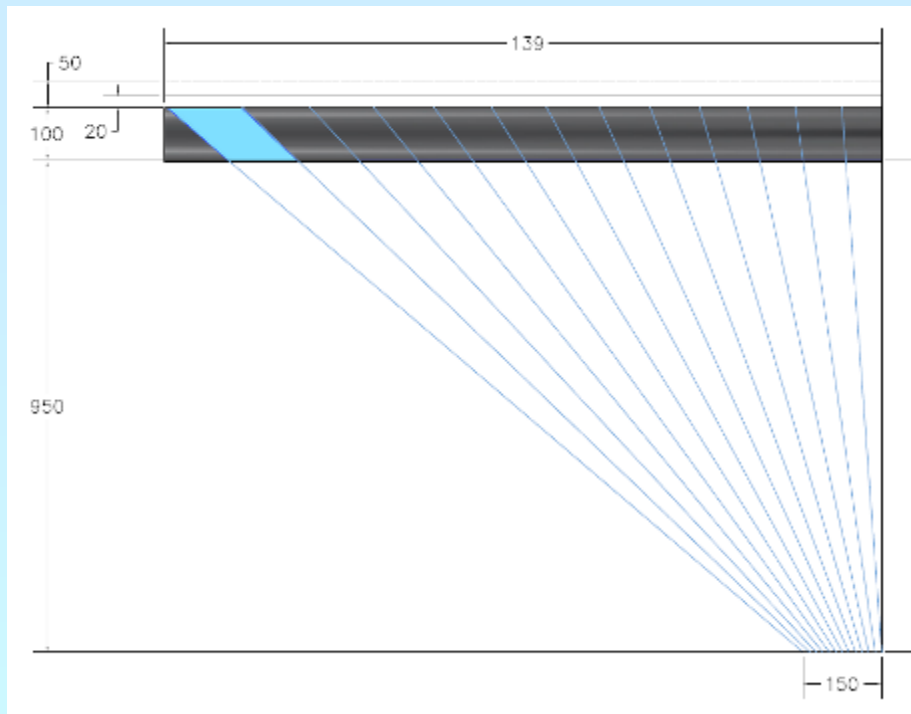
Inner and outer Hadronic Calorimeters
 256 segments each, steel and scintillator
 0.9 meter total thickness, ~4.6 meters long.
 Note how the outer and inner steel segments
 are angled with respect to radial lines (by 5
 degrees, with the inner HCal steel angled in the
 opposite direction of the outer HCal steel). The
 inner and outer steel plates are also offset by
 a $\frac{1}{2}$ period.

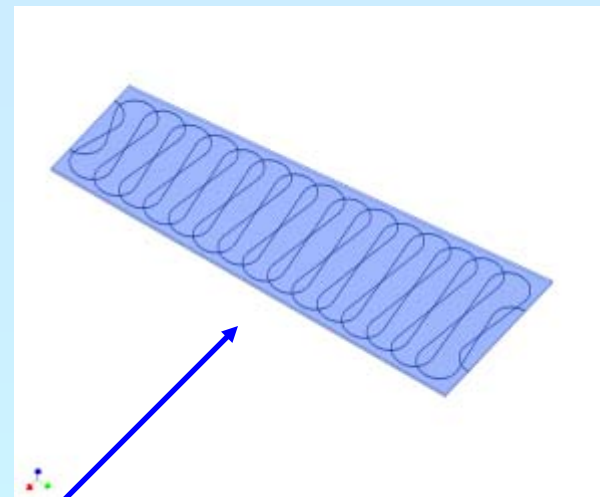
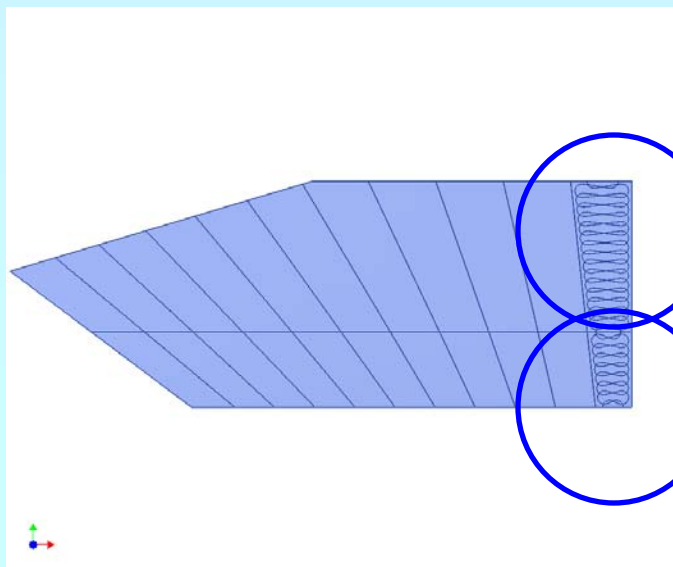
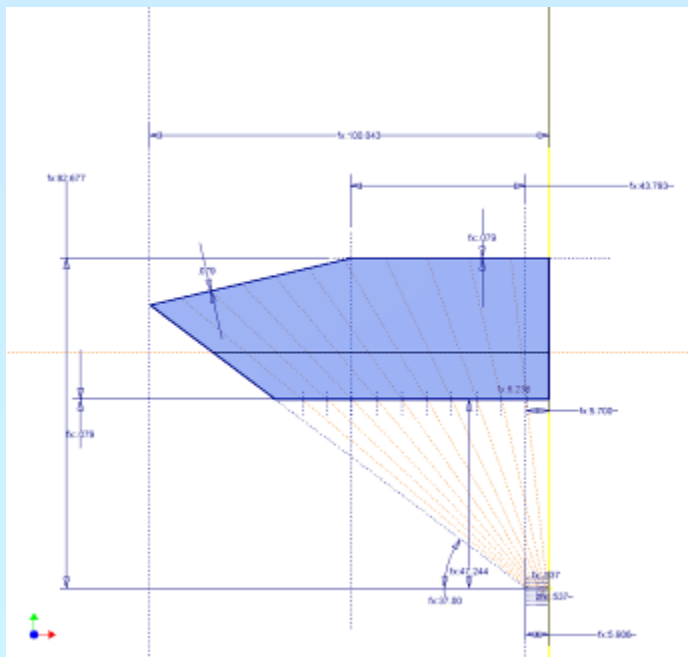




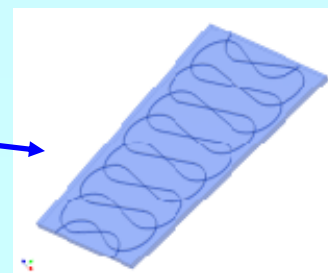
Electromagnetic calorimeter segments using "accordion" shaped scintillators and tungsten plates to optimize detector sampling

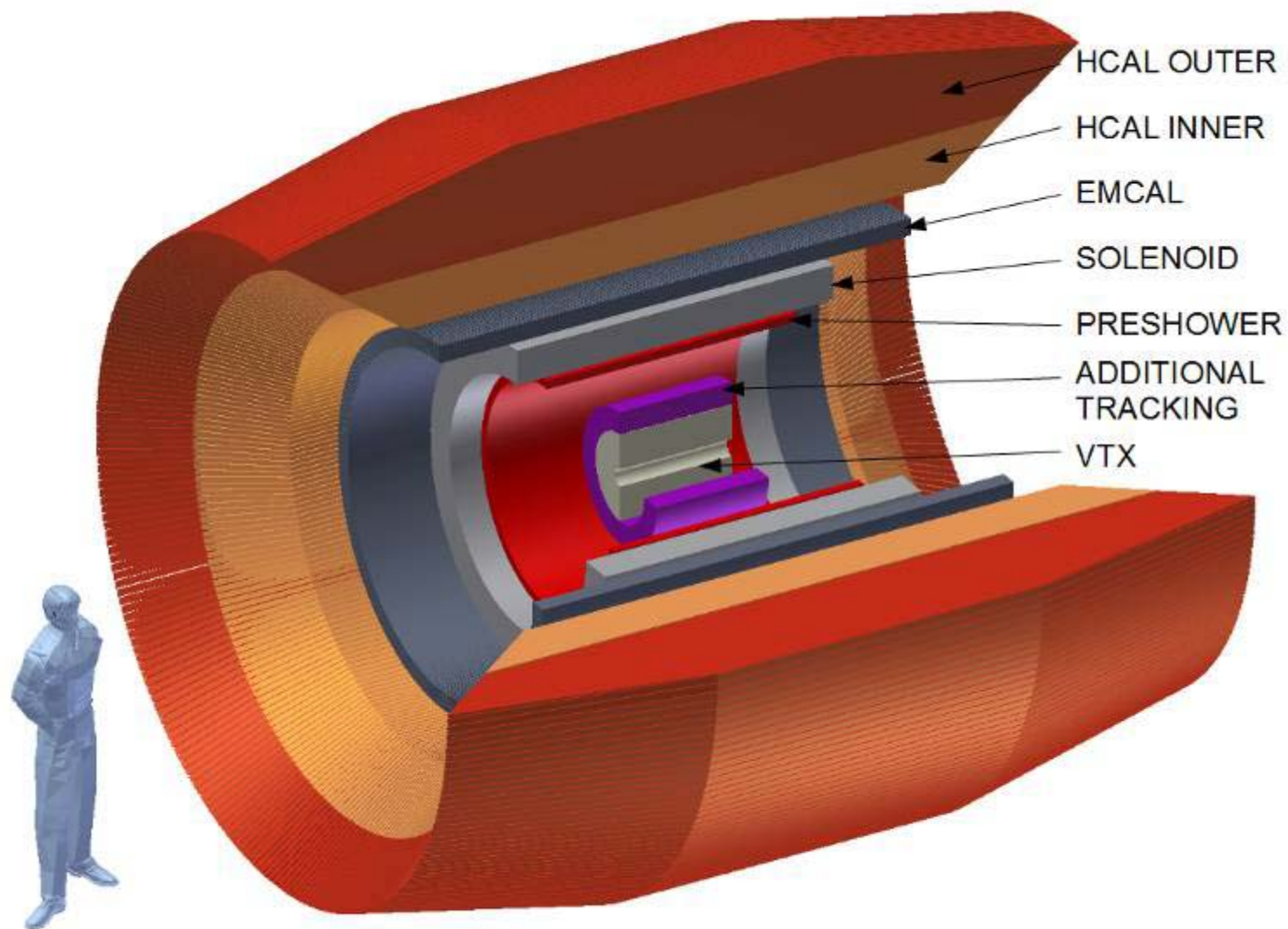
Meeting with potential vendor today





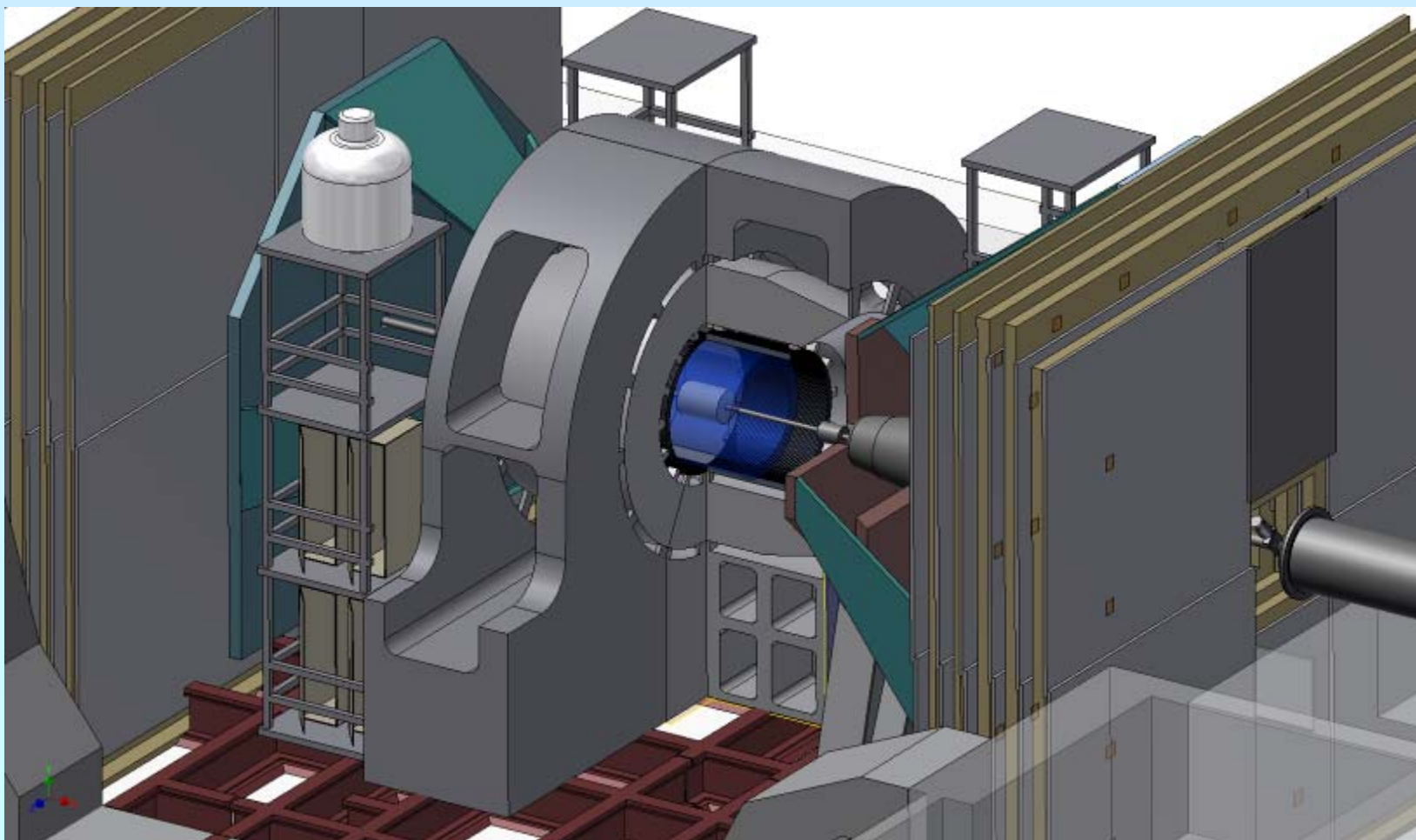
HCal Scintillator Concept





sPHENIX overall assembly, integration and maintenance concept

TECHNICAL SUPPORT ZONE



1. Configuration Management - New Procedures in progress. Plan sent to Les Hill.
2. Holiday Weekend: make sure all offices and equipment are secured.
3. CAD Area based PPE requirements (see slides)

Take 5 for Safety

Area Based PPE at C-AD

Collider-Accelerator Department
5-15-12

BROOKHAVEN
NATIONAL LABORATORY

a passion for discovery

Office of
Science
U.S. Department of Energy



SBMS Minimum Requirements for Area Based PPE

- During tours with escorted visitors, the entry PPE requirements can be temporarily suspended for the duration of the tour if operations are stopped and hazards are mitigated; this exemption does not apply to audits and Tier 1 Inspections where tour member may access hazards
- For maintenance workers, a BNL laundered uniform with long sleeve shirt and long pants may be substituted for a lab coat if there is no contamination risk on surfaces the uniformed worker will contact
- Long skirt that covers the lower leg is acceptable as long pants

Accelerator Area PPE

- All C-AD accelerator facilities have the BNL PPE postings required to enter these areas
- ***This is part of an area-based PPE system in which the PPE must be worn as specified on the posting just to enter the area***
- Minimum area-based PPE at accelerator facilities
 - Long Pants
 - Fully Enclosed Shoe



LONG PANTS



FULLY ENCLOSED
SHOE

Machine Shop Area PPE

- Light machine shop / tech shop
 - Long Pants
 - Fully Enclosed Shoe
 - Safety Glasses
- Heavy machine shop / Tech shop / Assembly area
 - Long Pants
 - Safety-Toe Shoe
 - Safety Glasses



SAFETY GLASSES



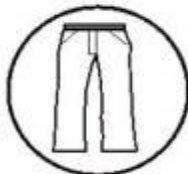
LONG PANTS



FULLY ENCLOSED
SHOE

Warehouse Area Based PPE

- Minimum PPE to enter warehouse facilities:
 - Long Pants
 - Fully Enclosed Shoe



LONG PANTS



FULLY ENCLOSED
SHOE



Chemical / Biological Laboratory PPE

- Area is characterized by frequent use of open containers of chemicals in operations such as synthesis, reactions, distillations, separations, purifications, and analysis via glassware, instrumentation, baths, ovens, furnaces, etc
- Minimum PPE to enter area
 - Lab Coat
 - Long Pants
 - Fully Enclosed Shoe
 - Safety Glasses



SAFETY GLASSES



LAB COAT






LONG PANTS



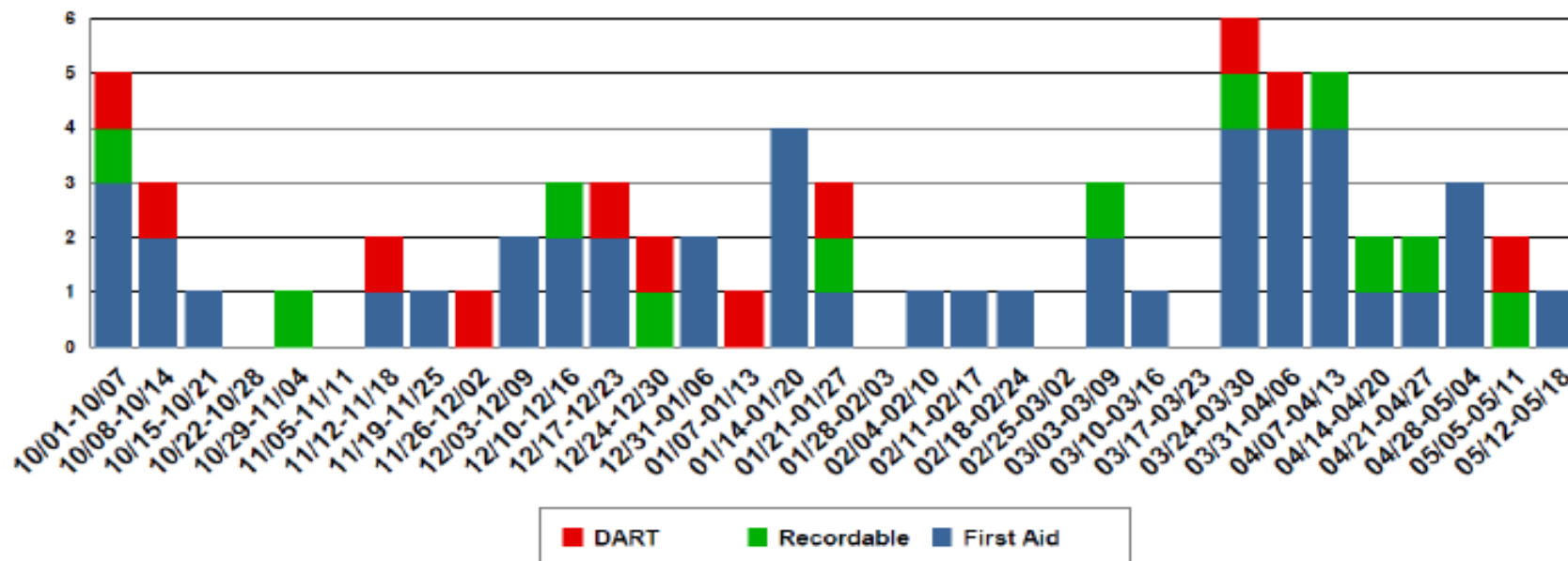
FULLY ENCLOSED SHOE



Hazard Placard Example

HAZARD INFORMATION PLACARD/EMERGENCY INFORMATION Safety, Health & Environmental Information			
Bldg: 0801 Room: 2-37		Contact Information	
Dept: MO Medical Department		Name: Dodge, Cleveland	Work #: 7234
NO FOOD OR DRINK ALLOWED		Cell/Home: 6314535905	
Rev. Date: 07/18/11 7:45 AM		AS #1: Scott, Joel	7520
		AS #2: Pena, Louis	8041
ESR / SWP / RWP / PI: MO-NCSS-Dodge-2011			
PROTECTIVE EQUIPMENT REQUIRED FOR ENTRY Area Designation: Chemical Laboratory			
			
SAFETY GLASSES	LAB COAT	LONG PANTS	FULLY ENCLOSED SHOE
HAZARDS OF THE AREA			
			
FLAMMABLE	CARCINOGEN REPRODUCTIVE TOXICITY	IONIZING RADIATION	NO OPEN FLAME
90 Day Area in room under hood			
ADDITIONAL INFORMATION			
ISOLATION LOCATIONS FOR UTILITIES (IF APPLICABLE)			
Electric:	N/A		
Gas:	N/A		
Steam:	N/A		
Ventilation:	N/A		

Injuries Per Week (FY) As of 5/18/2012



Injury Status:

FY12 YTD: DART – 11, TRC – 22, First Aid – 45

FY11: DART – 27, TRC – 42, First Aid – 45

FY10: DART – 19, TRC – 33, First Aid – 52

FY12 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seg/Occlnj/BNLInjuries.aspx>

Recent Injuries

5/14/12	First Aid	An employee injured their lower back moving boxes. At the OMC, first aid was given.
5/9/12	Recordable	An employee lacerated a thumb on a sharp edge and received sutures. This is recordable.
5/8/12	DART	A firefighter fell while climbing stairs at an off-site training facility.
5/4/12	First Aid	A contractor was injured when a wire punctured his finger. At the OMC, first aid was given.

Recent Events		
5/16/12	Non-Reportable	Less than one gallon of fuel was released to pavement. It was cleaned up with no environmental impact. (Event Link)
5/16/12	Non-Reportable	The categorizer erred in stating that this spill was oil in the previous version of this report which said "Less than one gallon of oil on John Hopkins St. and Lewis Rd." The spill turned out to be pollen - nonhazardous as determined by Environmental Services Division. (Event Link)
5/15/12	Non-Reportable	An experimenter in B480 was using an ozone generator for an experiment when one of the ozone detectors alarmed, just at the trip level. The ozone detector is set to alarm at 0.1 ppm, which is the ACGIH time-weighted-average value for an 8-hr occupational exposure. The experimenter called BNL Fire/Rescue for assistance. The alarm cleared quickly before F/R arrived. F/R did not detect any atmospheric abnormalities. This alarm occurred previously on the morning of 5/7/12. F/R now suspects a leak in the piping and has told the experimenter to suspend use of the ozone generator until a BNL plumber leak checks and seals any leaks in the system piping. (Event Link)
5/15/12	Non-Reportable	Fire alarm in B929. No fire or smoke as reported by F/R text message. Further investigation showed that the alarm was caused by an overheated resistor in an AGS RF anode power supply. The CAS Watch reported that smoke from AGS RF station D was generated when trying to bring it on line. They secured station D locally until RF personnel investigate during today's scheduled maintenance day. All the remaining AGS RF stations tripped as a result of the fire alarm because the high voltage to all the RF stations is automatically secured when a fire/smoke alarm condition occurs. F/R arrived and verified no fire then reset fire alarms. (Event Link)
5/14/12	Non-Reportable	At approximately 8am, the large liquid nitrogen tank on the north side of 725 was observed to have intermittent atmospheric release due to pressure. The cryogen group manually vented the tank, and the Control Room restricted access to the area. The high alarm to the Control Room did not function. (Event Link)

Where To Find PHENIX Engineering Info

Lab Holiday: Monday May 28, 2012 Enjoy !



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm